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10/559,955

05/18/2006

Michael Schlogl

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LUCAS & MERCANTI, LLP  
475 PARK AVENUE SOUTH  
15TH FLOOR  
NEW YORK, NY 10016

EXAMINER

WESTBROOK, SUNSURRAYE

ART UNIT

PAPER NUMBER

3612

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |   |   |  |
|------------------------------|---|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/559,955    | <b>Applicant(s)</b><br>SCHLOGL, MICHAEL |  |
|                              | <b>Examiner</b><br>SUNSURRAYE WESTBROOK | <b>Art Unit</b><br>4117                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Does not reference an independent claim which it is further limiting the structural of the claimed invention.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsiang (US 2002/0039065) in view of Nagaoka (US 2009/0046151).

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Regarding claim 7 Hsiang teach a sensor system for detecting a pedestrian collision in the front region of a motor vehicle comprising:

having a fiber optic sensor (30, fig 1) in the front region of the motor vehicle and to deform upon collision of an object.

Hsiang not does teach an infrared sensor in the front region of the motor vehicle that generates a signal for distinguishing between the collision of animate and inanimate objects

Nagaoka et al. teaches a sensor system having an infrared sensor (2R, fig 1) in the front region of the motor vehicle that generates a signal for distinguishing between the collision of animate and inanimate objects (see paragraph 0012-0014).

It would have been obvious to one of ordinary skill in the art, at the time of the invention to modify a sensor system, such as that disclosed by Hsiang to have a sensor generates a signal for distinguishing between the collision of animate and inanimate objects as taught by Nagaoka et al. in order to determined correct force to apply which provides a safety zone to prevent major damage to the vehicle as well as the object hit in a collision.

Regarding claim 10 Hsiang teach the limitations of claim 7.

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Hsiang also teaches a sensor system for detecting a pedestrian collision having signals of the fiber optic sensor (1, fig 1) and the infrared sensor evaluated by a control unit (4, fig 1).

Hsiang does not teach a sensor system for detecting a pedestrian collision having signals of an infrared sensor evaluated by a control unit.

Nagaoka et al. teach a sensor system for detecting a pedestrian collision having signals of a infrared sensor (2R, fig 1) evaluated by a control unit (1, fig 1).

It would have been obvious to one of ordinary skill in the art, at the time of the invention to modify a sensor system, such as that disclosed by Hsiang to have a sensor generates having signals of an infrared sensor evaluated by a control unit as taught by Nagaoka et al. in order to establish a safety zone to prevent major damage to the vehicle as well as the object hit in a collision.

5. Claims 8 & 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsiang (US 2002/0039065) and Nagaoka (US 2009/0046151) in view of Tanaka (US 2004/0186643).

Regarding to claim 8 & 9, Hsiang and Nagaoka el at. teach the limitations of claim 7.

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Hsiang and Nagaoka et al. do not teach a sensor system for detecting a pedestrian collision having the fiber optic sensor and infrared sensor integrated in the front fender of the motor vehicle

Tanaka et al. teaches a sensor system (1, fig 1) for detecting a pedestrian collision having sensors (3, fig 1) integrated in the front fender (2, fig 1) of the motor vehicle (see paragraph 0021).

It would have been obvious to one of ordinary skill in the art, at the time of the invention to modify a sensor system, such as that disclosed by Hsiang and Nagaoka et al. to place sensors in front fender taught by Tanaka et al. it is common knowledge to have different sensors such as infrared or fiber optic to be use in order to receive optimum placement of the sensor system to the structural elements of the vehicle where collision frequency occurs the most.

6. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsiang (US 2002/0039065) and Nagaoka (US 2009/0046151) in view of Ookawa (US 6504155).

Regarding to claim 11, Hsiang and Nagaoka et al. teach the limitations of claim 7.

Hsiang and Nagaoka et al. do not teach a sensor system for detecting a pedestrian collision having the control unit receiving signals from a temperature that are

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evaluated in the control unit in addition to the signals of the fiber optic sensor and the infrared sensor.

Ookawa do teach a sensor system having the control unit receiving signals from a temperature sensor (41, fig 1) that are evaluated in the control unit in addition to the signals of the fiber optic sensor and the infrared sensor.

It would have been obvious to one of ordinary skill in the art, at the time of the invention to modify a sensor system, such as that disclosed by Hsiang and Nagaoka et al. to have a temperature sensor taught by Ookawa for in order to receive information by different wave singles of the sensor system to determine the death of the collision impact.

7. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsiang (US 2002/0039065) and Nagaoka (US 2009/0046151) in view of Larson (US 2005/0166592).

Regarding to claim 12, Hsiang and Nagaoka et al. teach the limitations of claim 7.

Hsiang and Nagaoka et al. do not teach a sensor system for detecting a pedestrian collision having the control unit receiving signals from tachometer sensor that are evaluated in the control unit in addition to the signals of the fiber optic sensor and the infrared sensor.

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Larson et al. teach an energy system for detecting engine energy output having a control (20, fig 4) unit receiving signals from tachometer (170, fig 4) sensor that are measure the engine RPMs.

It would have been obvious to one of ordinary skill in the art, at the time of the invention to modify a sensor system, such as that disclosed by Hsiang and Nagaoka et al. to have a tachometer sensor taught by Larson et al. for in order to receive additional information that can be incorporated in sensor system using fiber optical and infrared sensor to determine the net impact of a collisions with an animate and inanimate objects.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 7-12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mattsson et al. teach pedestrian safety device. Favors teaches an anti-collision sensors. Figler et al. teach a special discrimination radiation detection apparatus. Smith teaches location system and method using infrared camera and optical signals. Leitner teaches fiber optic sensor in an anti-pinch sensor system. Moskowitz teaches system and method for detection animated being in a vehicle.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNSURRAYE WESTBROOK whose telephone number is (571)270-7820. The examiner can normally be reached on Monday to Thursday from 8:30am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 517-272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. W./  
Examiner, Art Unit 3612

/Jason S. Morrow/  
Primary Examiner, Art Unit 3612